

Title (en)

METHOD FOR THE PRODUCTION OF VALVE SEATS, AND VALVE

Title (de)

VERFAHREN ZUR HERSTELLUNG VON VENTILSITZEN UND VENTIL

Title (fr)

PROCEDE DE PRODUCTION DE SIEGES DE SOUPAPES ET SOUPAPE

Publication

EP 1536917 B1 20051130 (DE)

Application

EP 04760180 A 20040630

Priority

- EP 04760180 A 20040630
- EP 2004007062 W 20040630
- EP 03014909 A 20030701

Abstract (en)

[origin: DE202004020494U1] The ball valve may act as a non-return valve. It may form part of an injector pump for internal combustion engine. The ball (5) may lift off its conical seat (4) when the fluid flows in a first direction and prevents reverse flow. The ball engages in the conical seat, which has a pattern of fine circumferential grooves (6) to assist in sealing when the valve is closed. The grooves are separated by knife edges (7). There is a fluid flow channel (25) on the longitudinal axis (LA) of the rotationally symmetrical valve. The grooved structure on the valve seat may be made by honing and the grooves are deeper than the irregularities in the surface of the ball.

IPC 1-7

B24B 15/00

IPC 8 full level

B24B 15/00 (2006.01); **B24B 15/02** (2006.01); **B24B 33/02** (2006.01); **F16K 25/00** (2006.01)

CPC (source: EP)

B24B 15/00 (2013.01); **B24B 15/02** (2013.01); **B24B 33/02** (2013.01); **F16K 25/00** (2013.01)

Cited by

DE102007063200A1; DE102007063200B4

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 202004020494 U1 20050721; EP 1536917 A1 20050608; EP 1536917 B1 20051130

DOCDB simple family (application)

DE 202004020494 U 20040630; EP 04760180 A 20040630